

FEB 28 2008

Application Serial No: 10/815,151
Responsive to the Office Action mailed on: December 20, 2007

REMARKS

This Response is in response to the Office Action mailed on December 20, 2007.
Claims 1-5 and 30 are pending.

§112, Second Paragraph:

Claims 1, 2 and 5 are rejected as being indefinite. The rejection asserts that the term "elongate" is a relative term that is not defined in the specification and is therefore a relative term that does not provide a standard for ascertaining the structural features of the "flexible elongated substrate" found in claims 1, 2 and 5. However, the "flexible elongated substrate" is clearly defined throughout the specification as element (2) and in Figures 2B and 8B. Withdrawal of this rejection is requested.

§102 Rejections:

Claims 1-4 are rejected as being anticipated by Arai (JP No.11-345604). This rejection is traversed.

Claim 1 is directed to an energy device that requires, among other features, a winding body in which a band-shaped laminate having a flexible elongated substrate, a negative collector, a solid electrolyte, a positive active material, and a positive collector in this order is wound in a plate shape with the flexible elongated substrate placed inside. Claim 1 also requires that a cross-sectional shape of the winding body perpendicular to a winding axis includes portions at opposing ends of the cross-sectional shape with small radiuses of curvature and portions between the opposing ends of the cross-sectional shape with large radiuses of curvature. An advantage of these features is that a short circuit between layers due to stress related layer cracks is avoidable even though the portions of the materials that form the winding body have a small radius of curvature.

Arai does not disclose or teach or suggest these features. Arai is directed to a lithium secondary battery that includes constituent layers laid on top of each other, extending from a positive electrode collector (3) to a negative electrode collector (5), and encased between two portions of a battery casing (6). Thus, nowhere does Arai disclose or suggest that the constituent layers are wound into a plate shape, as required by claim 1. The rejection asserts that the language "wound in a plate shape" is directed to a process,

Application Serial No: 10/815,151

Responsive to the Office Action mailed on: December 20, 2007

and the plate-like structure of Arai disclose the structural features of claim 1. However, the language "wound in a plate shape" describes structural features of the winding body of claim 1, i.e. the shape of the article, and is not merely reciting a process of how the energy device is formed.

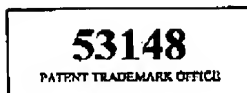
Arai also cannot disclose or suggest a winding body with "portions at opposing ends of the cross-sectional shape with small radiuses of curvature". Figure 1 of Arai merely discloses the constituent layers laid on top of each other. As these constituent layers are not wound, they cannot form "portions at opposing ends of the cross-sectional shape with small radiuses of curvature", as required by claim 1. For at least these reasons claim 1 is not suggested by Arai. Claims 2-4 depend from claim 1 and should be allowed for at least the same reasons.

§103 Rejections:

Claims 5 and 30 are rejected as being unpatentable over Arai. This rejection is traversed. Claims 5 and 30 depend from claim 1 and should be allowed for at least the same reasons. Applicants do not concede the correctness of this rejection.

Conclusion:

Applicants respectfully assert that claims 1-5 and 30 are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



Dated: February 28, 2008

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902-0902
Minneapolis, MN 55402-0902
(612) 455-3800

By: 

Douglas P. Mueller
Reg. No. 30,300
DPM/ahk